

## REMARKS

This paper is submitted in response to the Office action mailed on January 2, 2008. This paper amends claims 1, 15, 29 and 43. Claims 2, 7, 16, 21, 30, 35 and 44-68 were previously canceled. Accordingly, after entry of this Amendment and Response, claims 1, 3-6, 8-15, 17-20, 22-29, 31-34 and 36-43 will be pending.

### I. Claim Rejections Under 35 U.S.C. § 102

Claims 1, 6, 11, 15, 20, 25, 29, 34, 39 and 43 are rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent No. 6,691,245 to DeKoning (hereinafter "DeKoning"). Under 35 U.S.C. § 102 "[a] claim is anticipated if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." See MPEP § 2131. For the following reasons recited below, it is respectfully submitted that DeKoning does not anticipate any of the above listed claims. Initially, the rejection of independent claims 1, 15, 29 and 43 are addressed.

#### **A. Amended independent claims 1, 15, 29 and 43 are patentable because DeKoning fails to disclose the data storage system is read/write accessible by at least one application and read/write access to the data storage system remains available by the at least one application during the data preservation.**

As amended, independent claim 1 includes the limitation of "the data storage system is read/write accessible by at least one application and read/write access to the data storage system remains available by the at least one application during the data preservation." Amended independent claims 15, 29 and 43 include a similar limitation. Support for these amendments can be found in at least paragraph 0045 of the present application. It is respectfully submitted that DeKoning fails to teach these limitations as required by amended claims 1, 15, 29 and 43.

DeKoning describes a data storage system that provides a mirrored, fail-over storage on a remote storage device. However, the data storage system described by DeKoning requires that the applications accessing the data storage system do not have access to the data during the data preservation. As shown in Figure 6 of DeKoning, at the beginning of the data mirroring procedure, "the local host device quiesces, or suspends, any applications running on the local host device." See *DeKoning*, col. 10 lines 4-7. Further, after the data mirroring is complete, "the business continuance client sends a signal to the client devices instructing them to restart their affected applications." See *DeKoning*, col. 9 lines 56-62. In other words, DeKoning suspends all of the applications accessing the database prior to the data mirroring and restarts the applications after completion of the data mirroring. Therefore, DeKoning does not disclose read/write access to the data storage system remaining available by the at least one application during the data preservation as required by the

amended independent claims. Further, the Examiner has already acknowledged that "DeKoning teaches a checkpoint procedure wherein applications are put into a quiescent state." See *Office Action dated 08/03/2007, section 22(a)*. Therefore, applications that are accessing the data storage system of DeKoning are halted until the data mirroring is complete. As such, DeKoning fails to anticipate the limitation of "the data storage system is read/write accessible by at least one application and read/write access to the data storage system remains available by the at least one application during the data preservation" as required by amended independent claims 1, 15, 29 and 43.

**B. Dependent claims 6, 11, 20, 25, 34 and 39 are patentable because they depend upon and contain all of the limitations of amended independent claims 1, 15 and 29.**

Dependent claims 6, 11, 20, 25, 34 and 39 are rejected as being anticipated by DeKoning. However, these claims all depend directly from amended independent claims 1, 15 and 29. As demonstrated above, DeKoning fails to disclose the data storage system being read/write accessible by at least one application and read/write access to the data storage system remains available by the at least one application during the data preservation as required by the amended independent claims. Therefore, for at least this reason, DeKoning does not anticipate all each and every limitation of dependent claims 6, 11, 20, 25, 34 and 39.

**C. Conclusion**

For at least the reasons set forth in both section A and B above, DeKoning fails to disclose all of the limitations of claims 1, 6, 11, 15, 20, 25, 29, 34, 39 and 43. Accordingly, it is respectfully submitted that these claims are allowable over the cited art. The Applicant thus respectfully requests that the Examiner withdraw the rejections and allow these claims over the cited reference.

**II. Claim Rejections Under 35 U.S.C. § 103**

Claims 3, 8, 12, 17, 22, 26, 31, 36 and 40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over DeKoning in view of United States Patent No. 6,493,796 to Amon et al. (hereinafter "Amon"). Claims 4, 9, 18, 23, 32 and 37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over DeKoning in view of United States Patent No. 7,149,787 to Mutalik et al. (hereinafter "Mutalik"). Claims 13, 27 and 41 are rejected under 35 U.S.C. § 103(a) as being unpatentable over DeKoning in Amon, in further view of Mutalik. Claims 5, 10, 14, 19, 24, 28, 33, 38 and 42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over DeKoning in view of Mutalik in further view of Official Notice. A proper

prima facie obviousness rejection requires that the combined references teach or suggest all of the claim limitations.

**A. Dependent claims 3-5, 8-10, 12-14, 17-19, 22-24, 26-28, 31-33, 36-38 and 40-42 are patentable because they depend upon and contain all of the limitations of amended independent claims 1, 15 and 29.**

Dependent claims 3-5, 8-10, 12-14, 17-19, 22-24, 26-28, 31-33, 36-38 and 40-42 are rejected as being unpatentable over a combination of DeKoning, Arnon, Mutalik and Official Notice. However, these claims all depend, either directly or indirectly, from amended independent claims 1, 15 and 29. As demonstrated above, DeKoning fails to disclose the limitation of "the data storage system is read/write accessible by at least one application and read/write access to the data storage system remains available by the at least one application during the data preservation." Similarly, Arnon and Mutalik also fail to disclose the limitations of amended claims 1, 15 and 29. Arnon discloses a method for maintaining consistency of data stored in a group of mirroring devices. Mutalik discloses a similar system for mirroring and restoring data. However, these references fail to disclose access to the data storage systems remaining available by applications during the data mirroring. Thus, neither Arnon nor Mutalik are sufficient to remedy the insufficiency of DeKoning to teach or suggest all of the claim limitations. For at least this reason, dependent claims 3-5, 8-10, 12-14, 17-19, 22-24, 26-28, 31-33, 36-38 and 40-42 are patentable over DeKoning in combination with Arnon and Mutalik. The Applicant thus respectfully requests that the Examiner withdraw the rejections and allow these claims over the cited references.

**III. Conclusion**

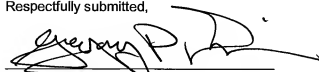
The Applicant thanks the Examiner for his thorough review of the application. The Applicant respectfully submits the present application, as amended, is in condition for allowance and respectfully requests the issuance of a Notice of Allowability as soon as practicable.

This Amendment is submitted contemporaneously with a petition for a two-month extension of time in accordance with 37 CFR § 1.136(a). Accordingly, please charge Deposit Account No. 04-1415 in the amount of \$460.00, for a two-month extension of time fee. The Applicant believes no further fees or petitions are required. However, if any such petitions or fees are necessary, please consider this a request therefor and authorization to charge Deposit Account No. 04-1415 accordingly.

If the Examiner should require any additional information or amendment, please contact the undersigned attorney.

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Respectfully submitted,



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